



The new Holmes Car arriving at the showroom, 52 Vanderbilt Avenue, on Tuesday, January 8, at the end of the drive from the factory at Canton, Ohio. At the wheel is Arthur Holmes, Chief Engineer and President of the Holmes Automobile Company, who drove the car from Canton. The route was from Canton to Pittsburgh; then over the heavy grades and hair-pin turns of the

Alleghany Mountain roads to Hagerstown, Maryland; thence to Baltimore, Philadelphia and New York. In spite of heavy snow drifts and ice covered roads, the run of 594 miles consumed only 46 gallons of gasoline—showing the remarkable mileage of 13 miles to the gallon.

# How Arthur Holmes Proves Out a Car

## *The New Holmes Air-Cooled*

From Canton, Ohio, to New York over steep mountain grades, through snow drifts and roads of snow and ice

**I**T'S all right to tie ribbons on a car in an automobile show, brilliant with glistening paint and shining accessories. They all look good on dress parade. The question is, what will the car do in a gruelling test of service—in the most difficult road conditions, through blizzard, in a 50-mile wind with top up and the chains on?

What the motor car owners and dealers are asking today is "What about the engine?"

"What about the endurance of a car?" "Its economy?" "Its dependability?"

"Where are the bugs in it?" Engineers, motor-wise technical men, automobile dealers, and alert car owners, who have seen the Holmes Car at its Show-room, 52 Vanderbilt Avenue, the past week, have been convinced that the Holmes Car is the last word in a perfected air-cooled automobile.

They did not meet Arthur Holmes, Chief Engineer and President of the Holmes Automobile Co. at the opening of the show.

He was on his way from the factory at Canton, driving a new Holmes Touring Car, which arrived in front of the show-rooms Tuesday noon.

This is a record of his trip. The engine was put into the chassis on Friday, January 4th, and the trip began on Saturday.

The engine had never been run on the block prior to being installed. It was so stiff that no man in the plant could turn it over. It required the electric starter and a man at the crank to start it.

The comparatively level road between Canton and Pittsburgh gave the only opportunity to break the engine in before tackling the heavy mountain grades east of Pittsburgh.

In spite of the severe conditions, the engine gave no trouble whatever.

Owing to the grades, and the poor traction, because of snow and ice, it was necessary to make long climbs in first and second gear.

The engine was frequently running idle while the occupants of the car cleared away snow with shovels, yet there was no heating.

The only adjustments made were those on the carburetor, made necessary by atmospheric conditions, an adjustment of a valve push rod, and one on the clutch.

Several times at the top of long steep grades, requiring the use of first and second gears, the switch was thrown to see if the engine would kick over, but it was so cool that there was absolutely no chance of ignition from overheating. This was a striking vindication of the soundness of design of the air-cooling system as developed in the Holmes Car.

Leaving Canton the tank contained 15 gallons of gasoline. 13 gallons were put

in at Uniontown, 10 gallons at Hagerstown, 10 gallons at Trenton, and 3 gallons remaining in the tank after the arrival in New York.

STATE OF NEW YORK  
COUNTY OF NEW YORK  
CITY OF NEW YORK

January 9th, 1918.

I, the undersigned, E. E. Smith, City of Canton, State of Ohio, depose and say:

I am in no way connected directly or indirectly with The Holmes Automobile Company of the City of Canton, State of Ohio. I was invited to ride in The Holmes Car leaving Canton, Ohio, at 7 A. M., January 5th, arriving at Grand Central Station, New York City, at 1 P. M., January 8th, 1918. I kept an accurate accounting of the entire tour as indicated herewith as follows:

January 5th, 1918.  
Left Canton, Ohio, at 7 A. M. with 15 gallons of gasoline in the tank and 2 quarts of oil in the engine. Made eleven adjustments, causing delays of from fifteen to twenty-five minutes each. Arrived at Uniontown, Pa., at 10 P. M. Took on 10 gallons of gasoline in tank.

Distance covered from Canton, 198 miles.  
January 6th, 1918.  
Left Uniontown, Pa., at 10 A. M. Stopped Sunday for dinner at Frostburg, Md. Arrived at Hagerstown, Md., 6:45 P. M. Took on 10 gallons of gasoline in tank and 3 quarts of oil added to engine. One valve adjusting screw broke, taking one-half hour to repair.

Distance covered from Canton, 310 miles.  
January 7th, 1918.  
Clutch adjusted at Hagerstown, Md. Left Hagerstown, Md., at 7 A. M. Arrived Trenton, N. J., 10 P. M. Took on 10 gallons of gasoline in tank. No adjustment of any nature was made on this run.

Distance covered from Canton, 336 miles.  
January 8th, 1918.  
Left Trenton, N. J., 7 A. M. arriving at Newark, N. J., 9:10 A. M. Left Newark 11:45 A. M., arriving at Holmes Show Room, No. 52 Vanderbilt Avenue, opposite Grand Central Terminal, New York City, at 1 P. M. 3 gallons of gasoline remaining in the tank, and 3 quarts of oil in the engine.

Distance covered from Canton, 594 miles.  
Signed: E. E. SMITH  
Sworn to before me this 9th day of January, 1918.  
L. Dillman, Notary Public, Kings County, N. Y.  
Certificate No. 162, N. Y. County, N. Y.

This makes a total consumption of 46 gallons for the distance driven of 594 miles, an average of about 13 miles to the gallon.

When the conditions under which the trip was made are considered, this is remarkable. Up the long grades, over the ice, with slipping wheels, in spite of the chains, in low or intermediate gear, with the top up in high winds, the gasoline consumption was approximately 30 per cent greater than it would be under normal driving conditions.

When stops were made to shovel snow, and for other causes, the engine was frequently left running idle.

Between Pittsburgh and Uniontown and between Baltimore and Philadelphia, the party lost its way, got into roads that were worse than the regular roads, and made frequent stops to inquire the way, with the engine idling and consuming gasoline.

The test demonstrates beyond any question that under ordinary conditions an average mileage of 16 miles and better may be expected.

In spite of a brand new motor, little more than one gallon was used for the 594 miles.

The first 104 miles, from Canton to Pittsburgh, are over comparatively level roads of hard clay.

From Pittsburgh to Uniontown, and from Uniontown to Hagerstown, the way is through the mountains, with long and steep grades. For instance, there is a

climb near Uniontown 7 miles long with a 10 per cent. grade.

In the mountains there was heavy snow, with big drifts. It was very cold, with the wind blowing almost a gale.

From Baltimore to New York, for the greater part of the way the roads were practically a sheet of ice.

The heavy grades and hair-pin turns encountered in the trip gave an excellent opportunity to test out the control, handling and power of the Holmes Car.

To show how severe the conditions were, at least 20 wrecked cars and trucks were seen on the road between Hagerstown and Philadelphia. They had slipped off the icy roads into the ditches.

As indicating the light weight balance and flexibility of the car, it may be mentioned that tire chains put on at Canton were not taken off during the trip; yet when the car reached New York the chains showed practically no wear at all. This is eloquent testimony to the easy riding qualities of the car, and an indication of the wonderful tire economy which its design was intended to insure.

This test, the most severe to which a new engine and car could be put, leaves no room for doubt that both the engine and the chassis design are practically and scientifically correct, and that no weakness exists in any part of the car.

## THE HOLMES AUTOMOBILE COMPANY, CANTON, OHIO

The Holmes Car Can Be Seen This Week at 52 Vanderbilt Avenue, Corner of 45th Street, Next Door to the Yale Club.